## PDR RID Report

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Presentation Document

RID ID **PDR** 188 **CSMS** Review Driginator Ref Priority 1

Section Page Figure Table

Category Name Design-Segment-level

Actionee HAIS

Sizing Models Sub Category Subject **Program Direction** 

## Description of Problem or Suggestion:

It is not clear that the design will meet the needs of EOS. The design as shown was only presented for AM-1 and TRMM. Examples of end to end performance measurements, system risk, and multi spacecraft operations have not been shown in detail. The design/presentation has not shown that future capabilities for multi spacecraft operations are possible. The different systems have shown design capabilities in their own domains but the integrated relationships, end to end integration, and expandability across time periods and systems have yet to be shown. The program needs to come to closure on the issue of cost dollars versus design capabilities for future evolution.

## Originator's Recommendation

The program needs to develop a set of top level design to agreements separate from cost between the different segments FOS,CSMS and SDPS and from these agreements establish needed design to requirements. The requirements need to address end to end integration, system risk, performance characteristics over time, system expandability, and multi spacecraft operations. Once this is completed a better understanding of both design and program constraints/impacts becomes clear.

**GSFC** Response by:

**GSFC** Response Date

HAIS Schedule 2/24/95 HAIS Response by: Forman

2/28/95 HAIS R. E. Armstrong **HAIS Response Date** 

The intent of this PDR was to cover only ECS Release A, with selective look-ahead to Release B and beyond in appropriate areas, e.g., WANs (sizing), LANs (for migration/evolution to high speed technologies) and the SMC hardware design. Follow-up in other areas that reflect long-term evolution of the system included migration from DCE to OODCE to CORBA.

One of the primary goals of the Release A design team was to develop a very flexible design that could easily scale up to the additional needs to future releases (e.g., AM-1 and beyond) with minimal impact to the existing installation. This means that our choices for Release A should (1) not result in breakage, or throw-away at Release B: and (2) should be upgradeable with a minimal disturbance to operations (e.g., no additional network cable plants). We believe that our briefing at the FOS, CSMS and SDPS PDRs adequately responded to these goals. (Note that the Release A LAN briefing at the SDPS PDR provided more explicit detail about migration to Release B and beyond).

The relationship between CSMS and other segments, as well as M&O, were featured in both the FOS and SDPS PDRs. Our participation in the SDPS PDR was explicitly focused on areas in which concern about inter-segment coordination were expressed, and we have responded to RIDs on the need for further ops concept work across segments.

Regarding cost dollars versus design capabilities, ECS and ESDIS agreed that the ECS PDR should be based on the most current technical baseline.

Status Date Closed 3/8/95 **Sponsor** Closed Daly Attachment if any

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